

**ABSTRACT OF THE DISCLOSURE**

The present invention provides a method and apparatus for designing storage systems. Stores are clustered into workloads by using one clustering technique or a combination of two or more clustering techniques to reduce the number of constraint calculations that need to be performed. By reducing the number of constraint calculations that need to be performed, workload assignments can be generated in a reasonably short amount of time, thus enabling larger, more complex storage systems to be designed. The clustering techniques include one or more of the following: (1) clustering stores to reduce the overall number of stores, and (2) clustering stores into aggregates having storage capacity requirements and/or (3) bandwidth requirements that allow no more than a particular number of aggregates to be placed per logical unit (LU).